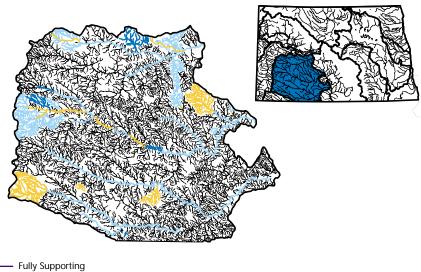
## North Dakota



- Threatened
- Partially Supporting
- Not Supporting
- Not Supporting
  Not Assessed
- Basin Boundaries (USGS 6-Digit Hydrologic Unit)

This map depicts aquatic life use support status.

For a copy of the North Dakota 1998 305(b) report, contact:

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The report is also available on the Internet at: http://www.health.state.nd.us/ndhd/environ/wq/index/htm

### **Surface Water Quality**

North Dakota reports that 71% of its assessed rivers and streams have good water quality that fully supports aquatic life uses now, but good conditions are threatened in most of these streams. Sixty-seven percent of the assessed streams fully support swimming. Siltation, nutrients, pathogens, oxygen-depleting wastes, and habitat alterations impair aquatic life use support in 29% of the surveyed rivers and impair swimming in over 32% of the surveyed rivers. The leading sources of contamination are

agriculture, drainage and filling of wetlands, hydromodification, and upstream impoundments. Natural conditions, such as low flows caused by water regulation, also contribute to aquatic life use impairment.

In lakes, 96% of the surveyed acres have good water quality that fully supports aquatic life uses, and 85% of the surveyed acres fully support swimming. Siltation, nutrients, metals, and oxygen-depleting substances are the most widespread pollutants in North Dakota's lakes. The leading sources of pollution in lakes are agricultural activities (including nonirrigated crop production, pasture land, and confined animal operations), urban runoff/ storm sewers, hydromodification, and habitat modification. Natural conditions also prevent some waters from fully supporting designated uses.

### **Ground Water Quality**

North Dakota has not identified widespread ground water contamination, although some naturally occurring compounds may make the quality of ground water undesirable in a few aquifers. Where human-induced ground water contamination has occurred, the impacts have been attributed primarily to petroleum storage facilities, agricultural storage facilities, feedlots, poorly designed wells, abandoned wells, wastewater treatment lagoons, landfills, septic systems, and the underground injection of waste. Assessment and protection of ground water continue through ambient ground water quality monitoring activities,

the implementation of wellhead protection projects, the Comprehensive Ground Water Protection Program, and the development of a State Management Plan for Pesticides.

# Programs to Restore Water Quality

North Dakota's Nonpoint Source Pollution Management Program has provided financial support to 50 projects since 1990. Although the size, type, and target audience of these projects vary, the projects share the same basic goals: (1) increase public awareness of nonpoint source pollution, (2) reduce or prevent the delivery of NPS pollutants to waters of the state, and (3) disseminate information on effective solutions to NPS pollution.

## Programs to Assess Water Quality

The North Dakota Department of Health monitors physical and chemical parameters (such as dissolved oxygen, pH, total dissolved solids, nutrients, and toxic metals), toxic contaminants in fish, whole effluent toxicity, and fish and macroinvertebrate community structure. North Dakota's ambient water quality monitoring network consists of 27 sampling sites on 24 rivers and streams. The Department's biological assessment program has grown since 1993. Currently, biosurveys are conducted at approximately 50 sites each year.

North Dakota is developing biological assessment methods and criteria for depressional and riparian wetlands.

#### Individual Use Support in North Dakota Percent Good Good Fair **Poor** Not **Attainable** (Partially (Fully (Not (Threatened) Designated Usea Supporting) Supporting) Supporting) Rivers and Streams (Total Miles = 54,373)b Total Miles Assessed 62 26 9 11,866 3 0 100 147 0 0 0 0 51 30 16 2 8,842 Lakes (Total Acres = 660,097) **Total Acres** 72 Assessed 24 640,591 100 0 464,319 0 0 63

16

0

22

Note: Figures may not add to 100% due to rounding.

625,591

<sup>&</sup>lt;sup>a</sup> A subset of North Dakota's designated uses appear in this figure. Refer to the state's 305(b) report for a full description of the state's uses.

<sup>&</sup>lt;sup>b</sup>Includes nonperennial streams that dry up and do not flow all year.